

## **Massachusetts Water Resources Commission Meeting Minutes for December 11, 1997**

### **Commission Members in Attendance:**

Mark P. Smith	Designee, Secretary of Environmental Affairs
Arleen O'Donnell	Department of Environmental Protection
Peter Webber	Department of Environmental Management
Joseph M. McGinn	Metropolitan District Commission
Jane Mead	Massachusetts Coastal Zone Management
Marilyn Contreas	Department of Housing and Community Development
Karen Pelto	Department of Fisheries, Wildlife, and Environmental Law Enforcement, attending for Mark Tisa
Richard J. Butler	Public Member
Bob Zimmerman	Public Member
Francis J. Veale	Public Member
Gary Clayton	Public Member

### **Others in Attendance:**

Mike Gildesgame	Department of Environmental Management
Richard Thibedeau	Department of Environmental Management
Lou Wagner	Massachusetts Audubon Society
E.T. Williams	DPW, Town of Canton
Anthony J. Zuen	SEA Consultants Inc. Cambridge, MA
Michele Drury	DEM, Office of Water Resources
Kerry Mackin	Ipswich River Watershed Association
Ellen Gugel	EOEA
Steve Asen	DEM, Office of Water Resources
Duane LeVangie	DEP, Water Management Act
David Masciarlli	Sharon Water Dept.
Vicki Gartland	DEM, Office of Water Resources
Phillip Brady	Mass. Division of Marine Fisheries, Pocasset
Stephen Burrington	Conservation Law Foundation
Jenna Ide	Neponset Initiative
Ian Cooke	Neponset River Watershed Association
Michele Barden	Neponset River Watershed Association
George Jenkins	Town of Canton

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### ***Agenda Item #1: Executive Director's Report***

***Report on morning stream flow workshop.*** Mark P. Smith reported that the initial workshop on protecting stream flows was attended by twice as many people as expected. There were over 30 water resources experts from inside and outside the agencies representing federal agencies, watershed associations, and consultants. Many WRC members attended as well. This morning's session was the start of implementation of the FY98 WRC work plan.

**Agenda Item #2: Vote: Adoption of the Minutes of November 13, 1997 Meeting**

The minutes of the November 13, 1997 meeting were unanimously accepted without change.

**Agenda Item #3: Presentation: Staff Recommendation on the Interbasin Transfer application regarding Canton's well #9.**

*Note: A vote is planned for the January 8, 1998 WRC meeting.*

**Staff Report**

Michele Drury, DEM/Office of Water Resources  
Vicki Gartland, DEM/Office of Water Resources

December 1 was the deadline for agency comments on the application. The Interbasin Transfer Act applies is because Canton is 70 percent sewerage to MWRA.

**Concerns/Conditions of Permit**

- Infiltration and inflow (I & I) in the sewer system is very high: 70 percent (MWRA average is 58 percent). Although the town appropriates money every year to improve its I & I rate, the staff recommends conditioning the permit on reduction. If Canton reaches the MWRA average, then the amount going out of basin would be reduced by the amount of the new withdrawal.
- A good water conservation plan.
- A formalized drought plan that is activated by actual stream flow numbers.
- Canton was requested to analyze combined well withdrawals during the public process.
- Interbasin Transfer Act review requires analyzing cumulative impacts with regard to stream flow.

**Recommendations**

- Keep the reductions in stream flow to less than 15 percent by using 0.28 cfs as a trigger to cease operation of the well.
- Monitoring plan: the staff recommends a gauging station to monitor stream flow. A precedent exists for requiring a gauging station (Millbrook).
- Staff has raised the original recommendation from 95 cfs to 100 cfs.
- With fish ladder restoration plans in place, DMF's concern is adequate water upstream for migrating fish. The final recommendation will address this concern.

**Town of Canton**

Tony Zuena, SEA Consultants  
E.T. Williams, Superintendent, Town of Canton DPW  
George Jenkins, Selectman, Town of Canton

All speakers urged the Commission to approve the staff recommendation as written. They report that Canton is already implementing conditions of the permit. Aggressive I & I investments have

reduced the rate from 2.71 mgd to 2.17 mgd. There are plans to maintain the MWRA connection.

The Town believes that a wastewater treatment plant was not a cost-effective option as it would cost \$10 to \$15 million for a plant plus \$100 to \$150 million in collection. As for future sewage expansion plans, Canton has hired a consultant and has draft report available. Canton requests a letter from the Commission to Dedham and Westwood urging cooperation with Canton to develop regional plans. Although the town has no plans to sewer lots of one acre or greater, there are currently smaller lots with Title 5 problems that will be sewered (MWRA).

### **Neponset River Watershed Association (NepRWA)**

Ian Cooke, Executive Directory  
Jenna Ide, Neponset Initiative  
Michele Barden

The Neponset River Watershed Association strongly opposed the approval of this application saying that the Neponset is already a stressed basin. NepRWA reported that high temperatures, fecal coliform, and low dissolved oxygen result from low flows currently and that in the lower third of the river, there are recreational impacts and further reduction will have serious aesthetic impacts and impacts on fisheries.

Ian Cooke provided a handout on NepRWA's position detailing why the proposal fails to meet five of the eight criteria under the Interbasin Transfer Act (2, 3, 4, 5, and 8). Please see this summary for highlights. In summary, NepRWA's position is that:

- Canton has failed to conserve water.
- The analysis fails to consider practical, cost-effective wastewater treatment options and otherwise fails to mitigate the withdrawal by returning wastewater to the basin.
- This project provides small economic benefit for a limited number of people.
- Stream flows are already stressed.

NepRWA is extremely concerned that given the rate of spending Canton has appropriated over the last five years for I & I reduction, it will take 30 years to renovate Canton's I & I.

### **Conservation Law Foundation**

Steven Burrington, Senior Attorney

CLF is extremely concerned about this case. Its position is that an interbasin transfer should be the last resort, not the first as MWRA policies encourage.

### **Discussion and Concerns**

#### **Marine Fisheries and Stream Flow Numbers**

DFWELE's main concern is for marine fisheries. The stream flow number is the issue which will be addressed in the final recommendation. As yet, it has not been incorporated.

DFWELE and the Neponset River's Basin Plan call for restoration of a fish ladder. There is active restoration of fisheries being conducted and stocking of shad and herring. DFWELE asserts that although the staff recommendation appears fine for low summer flows, it lacks the required spring and fall flows for anadromous fish migrations. While the staff recommends .28 cfs year round, **DFWELE wants seasonal average flow** (a range from .47 cfs to 2.68 cfs depending on the season). Vicki Gartland says that with 2.68 cfs, there is no noticeable impact in the spring, when it is pumping from groundwater storage, although there may be in the fall. Staff saw only a 1 percent reduction during spring. The "Final Report on the Neponset River Volunteer Flow Monitoring at Lower Mills, Milton, 1995-1996" (Chase, Pelto and Ide) states that at flow levels below 100 cfs below the Milton Lower Mills Dam, spawning habitat began to be dewatered.

### Case Specifics

Regarding the staff recommendation, shouldn't the town be required to meet the conditions before issuing the permit? Michele Drury cited precedents for conditioning permits on future actions.

Other towns surrounding Canton have a greater need of water such as Stoughton. Giving this water to Canton will reduce alternatives for those needier towns. Michele Drury responded that legally the WRC must judge this application by the 8 criteria under 313 CMR 4.05. We cannot "save" water in case another town needs it, nor can we make judgements on which community in the basin is "more deserving".

What is the net benefit of developing well #9? Do the conditions of the permit offset the cost? Michele Drury stated that it is impossible to put actual numbers on I & I, but that if Canton gets down to the average MWRA I & I rate, then there is a net benefit.

DFWELE is concerned about using 100 cfs at the Milton Lower Mills Dam. While they agree this flow will prevent dewatering, they are less certain it will provide adequate coverage during spring and fall migration.

There was a dispute on the trend of residential per capita use. Canton claims they have reduced it from 95 gpd in 1995 to 87 gpd in 1996. NepRWA says that it has increased from 79 gpd to 87 gpd.

Another dispute on sale of water to neighboring Stoughton: Canton claims they do not sell water to Stoughton. NepRWA states that 800 mgd are sent down to Stoughton through Canton's MWRA connection and that this water is bought from MWRA by Canton and sold to Stoughton.

NepRWA questions how are the proposed conditions in the permit monitored. Can citizens monitor them and how?

NepRWA wants I & I measured at the end of the system. May be more money to mitigate through I & I. At the current rate, the town will take 30 to 90 years to get there. And that's uncertain anyway.

Bob Zimmerman would like a reduction in existing impervious surface as a condition for the permit.

Gary Clayton asked if a required I/I ratio of greater than one to one could be a condition.

### **Policy Issues**

The MWRA policy to ask partial users to develop their own local sources is at odds with WRC policies of trying to keep water in stressed basins such as the East Branch of the Neponset.

Developing local sources reduces pressure on an already existing interbasin transfer (out of the Quabbin Reservoir to Boston Harbor and elsewhere).

The real problem is what happens to the water later (wastewater). Centralized wastewater treatment is the real problem here, not taking the water in the first place. Centralized wastewater solutions should be the last resort after 1) discharge to groundwater; or 2) discharge to surface water.

A possible policy is to condition permits for stressed basins on a one-to-one or greater return of wastewater to the basin. A greater than one-to-one return should particularly be considered in stressed basins and also in cases like Canton's where there is uncertainty that conditions will achieve the desired results (here, achieving target I & I numbers in a timely manner)

At what point can the WRC make a determination that the MWRA interbasin transfer is more or less desirable than any of these individual interbasin transfers the Commission has been seeing recently? In effect, the Commission is managing "dueling" interbasin transfers.

Since the MWRA has gotten water use down from 340 mgd to 250 mgd, there is about 20 to 50 mgd additional available for allocation. How is it decided which towns get it? Which towns are neediest? Which towns request it first?

Bob Zimmerman prefers stormwater remediation as a condition because it's an actual number (number of feet of parking lot to amount of recharge) than I & I reduction.

Joe McGinn expressed concern about inbasin wastewater disposal. Mr McGinn conducted the modelling for the EMMA study 20 years ago. The EMMA study looked at tertiary treatment. NepRWA was concerned then about the water quality impacts of inbasin disposal, but they don't have this concern today.

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Meeting minutes approved 1/29/98